

Abstracts

A289

Therapy (PDT) and best supportive care in treating patients with AMD. **METHODS:** A cost-effectiveness model was created using outcome data from the ANCHOR and MARINA clinical trials. The model operates on quarterly cycles and a 10-year time horizon. At baseline, Early Treatment Diabetic Retinopathy Study (ETDRS) visual acuity was 55 and average age was 77 in the base case. Cost of services were obtained from the CMS website, drug costs were obtained from ASP prices, and visual impairment costs were based on a prospective study by Schmier and colleagues. All costs were inflated to 2007 dollars using the Health Services CPI. Utility values were based on a time-tradeoff analysis conducted by Brown and colleagues. A 3% discount rate was used for both costs and QALYs. **RESULTS:** For predominantly classic AMD, Lucentis 0.5 mg was a dominant strategy compared to PDT and the Incremental Cost-Effectiveness Ratio (ICER) for Lucentis 0.5 mg relative to Lucentis 0.3 mg was \$62,905/QALY. For patients with minimally classic or occult AMD, Lucentis 0.5 mg was a dominant strategy compared to best supportive care and the ICER for Lucentis 0.5 mg relative to Lucentis 0.3 mg was \$322,367/QALY. Influential variables driving the results in this analysis include a patient's baseline visual acuity, costs associated with visual impairment, and the price of Lucentis. **CONCLUSION:** Despite its high treatment costs, Lucentis is a dominant strategy compared to PDT and best supportive care primarily because it prevents patients from reaching the highly expensive state of blindness. Treating AMD patients with Lucentis before they reach a legal blindness state can generate considerable cost-savings to society.

PSS16

A COST-EFFECTIVENESS ANALYSIS OF TWO TOPICAL OPHTHALMIC ANTIBIOTIC SOLUTIONS INDICATED FOR THE TREATMENT OF BACTERIAL CONJUNCTIVITIS

Waycaster C

Alcon Laboratories Inc, Fort Worth, TX, USA

OBJECTIVE: The objective of this study was to compare the cost-effectiveness of moxifloxacin 5 mg/ml ophthalmic solution (MF) to polymyxin B 10,000 units/trimethoprim 1mg/ml ophthalmic solution (PT) for the treatment of bacterial conjunctivitis (BC). **METHODS:** Physician-assessed BC early clinical cure rates were taken on day-2 of 7 day therapy from a multi-site, randomized, double-masked study comparing MF to PT. The clinical cure rates were used to calculate a number-needed-to-treat (NNT) estimate for the most efficacious alternative. NNT was then used as the measure of effect in an incremental cost-effectiveness analysis. Only the direct costs of drug therapy were considered in the economic analysis. The drug costs were derived from a standard reference source. The economic perspective was that of the payer. No cost discounting was performed due to the short time horizon of BC therapy. **RESULTS:** Thirty-two subjects (47 eyes) received MF and 30 subjects (43 eyes) received PT. At baseline there were no statistical differences in BC severity or duration, patient age, gender or ethnicity between the two treatment groups. After 2 days of topical ophthalmic antibiotic therapy, 83.3% of the MF patients were deemed clinically cured compared to 43.2% of the PT patients. The NTT for the MF group was estimated at 2.5. The MF incremental cost-effectiveness ratio (ICER), the cost of curing one more BC patient earlier, was estimated at \$37.28. **CONCLUSION:** MF cures BC sooner than PT thus reducing the duration of illness experienced by BC patients. Since MF is a newer and more potent antibiotic than PT, it incurs additional costs. The incremental cost to obtain the additional benefit of an earlier cure from MF therapy is relatively small (< \$0). Further research may demonstrate a lower

cost-effectiveness ratio from MF therapy if the indirect costs of BC are considered.

PSS17

ECONOMIC EVALUATION OF MELOXICAM SOLUTION 0.030% RESPECT AN OPHTHALMIC SODIUM DICLOFENAC SOLUTION 0.1% ON THE EYES OF PATIENTS WHO UNDERWENT TO LASIK LASER EYE SURGERY AT THE IMMEDIATELY POST-OPERATIVE TIME

Baiza L

Sophia Pharmaceuticals, Guadalajara, Jalisco, Mexico

OBJECTIVE: Compare the effectiveness and costs of the administration of an ophthalmic Meloxicam solution 0.030% with a sodium Diclofenac solution 0.1% on the eyes of patients who underwent to Lasik laser eye surgery at the immediately post-operative time. **METHODS:** Adopting the perspective of a health care payer, we developed a cost-effectiveness analysis. Temporary horizon was three months. A discounting rate was not used. The source of information of cost and effectiveness was a randomized clinical trial. The perspective was from Mexican Institute of social Security. The method used for cost was microcosting and case mix. The effectiveness was measured with different end points. The cost-effectiveness analysis was made for those variables with statistically significant differences. The evaluation was made with incremental analysis and net benefits approach. The sensitivity analyses was of one way, two ways and probabilistic. **RESULTS:** The highest cost was with Diclofenac solution (USD\$9.29) that was 5.9% higher than Meloxicam (\$8.74) the measured efficacy named Flare and ciliary injection was superior with Meloxicam compared with Diclofenac 148 vs. 149 for Flare and 150 vs 153 respectively ($p < 0.0001$) for ciliary injection, the cost for success obtained with Meloxicam was of USD\$8.74 and USD\$9.29 with Diclofenac, the incremental analysis show that Meloxicam is dominant over Diclofenac. Health Net Benefits, Monetary Net Benefits and the Acceptability curves were favourable for Meloxicam independent the willingness to pay. **CONCLUSION:** The Meloxicam solution was dominant over Diclofenac in the application on the ocular surface in patients who underwent to Lasik laser eye surgery in the immediate postoperative period. The sensitivity analysis was a robust basis for the study.

PSS18

COST-EFFECTIVENESS OF THE BIOLOGIC AGENTS UTILIZED IN THE TREATMENT OF CHRONIC PLAQUE PSORIASIS: A MARKOV MODEL

Goldberg LD¹, Feldman SR², Marshall TS³, Jaracz E³

¹Goldberg, MD & Associates, Battle Ground, WA, USA, ²Wake Forest University School of Medicine, Winston Salem, NC, USA, ³Astellas Pharma US, Deerfield, IL, USA

OBJECTIVE: It is the objective of this study to estimate the cost per treatment success over a one-year timeframe of the five biologic therapies used to treat patients with moderate to severe psoriasis in the United States. **METHODS:** A Markov model was developed to compare the relative cost components in psoriasis treatment with biologics. Drug costs were based on wholesale acquisition cost with consideration of net contractual discounts and patient co-share or co-payment. Clinical efficacy, for both short-term (12 weeks) and longer-term (24+ weeks) treatment, was based on the published peer-reviewed literature. The primary economic endpoint was the cost of therapy (defined as the cost of drugs, laboratory, infusion, and professional services) per 75% improvement from baseline in the Psoriasis Area and Severity Index score (PASI 75) achieved. Analysis was conducted for each